

**Note to Readers:** If you need assistance accessing items in this Supplemental Material, please contact [ehp508@niehs.nih.gov](mailto:ehp508@niehs.nih.gov). Our staff will work with you to assess and meet your accessibility needs within 3 working days.

## **Table of Contents for Supplemental Material**

### **Placental DNA Methylation Related to Both Infant Toenail Mercury and Adverse Neurobehavioral Outcomes**

Jennifer Z.J. Maccani, Devin C. Koestler, Barry Lester, E. Andrés Houseman, David A. Armstrong, Karl T. Kelsey, and Carmen J. Marsit

**Table S1.** Mean and standard deviation of 13 NNNS scores in infants with non-high-risk vs high-risk NNNS profiles.

**Table S2.** Mean  $\beta$  values and p-values of 339 CpG loci associated with infant toenail Hg (omnibus p-value=0.017;  $\Delta\beta > 0.125$  between any two Hg tertiles). “NA” indicates that a locus does not fall within a defined gene region according to Illumina annotation data.

**Figure S1.** Heatmap demonstrating methylation in an independent set of 151 placental samples at 339 Hg-associated loci. Placental samples are in columns; rows are 339 loci. High-risk (red) and low-risk (blue) neurobehavioral profiles are color-coded above figure.

**Figure S2.** Plot of placental *EMID2* methylation at 6 CpG loci significantly associated with both infant toenail Hg tertile and high-risk neurobehavioral profile and placental *EMID2* gene expression: A) cg13267931,  $r = -0.40$ ; B) cg27179533,  $r = -0.36$ ; C) cg14874750,  $r = -0.39$ ; D) cg23424003,  $r = -0.33$ ; E) cg27528510,  $r = -0.37$ ; F) cg14048874,  $r = -0.45$ .